

Houghton Mifflin Mathematics

Publisher: Houghton Mifflin Co.

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Content Level: Math

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Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions. They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/Instructional Materials Review team completed each evaluation form during the week of July 8-12, 2002. In order to maintain the integrity of the review team's comments, editing was limited to spelling and punctuation.

CONTENT/PROCESS

Strengths: A separate booklet entitled Kentucky Teacher's Edition is included with the Teacher's Edition. This booklet includes "Meeting the Needs of KY Teachers and Students", "Chapter Planner Charts with correlations to the KY Core Content for Mathematics Assessment", and "Grade-level correlations of Houghton Mifflin Mathematics to the Kentucky Core Content". The material includes separate booklets entitled "English Language Learners Handbook", "Problem Solving for Advanced Learners", and separate pages in the Teacher's Edition entitled "Reaching All Learners". These pages have a separate section that addresses Special Needs strategies, Advanced Learners, and ESL. A separate packet of intervention strategies entitled "Problem Solving for Success" and "Reteach Blackline Masters".

Weaknesses: There is limited inclusion of other content areas.

ASSESSMENT

Strengths: The website www.eduplace.com offers on line assessment tools, test taking strategies, and brain teasers. The textbook format is consistent between the practice pages and assessment activities.

Weaknesses: There were no portfolio prompts observed.

ORGANIZATION AND STRUCTURE

Strengths: A separate booklet entitled "Spiral Review" is included in the materials and a "Skills Trace" is at the beginning of each chapter. These items are also included in the Kindergarten Level. New vocabulary is introduced in context using bold or highlighted words along with a Word Box at the beginning of each lesson. Definitions are given at the beginning of the chapter along with a list of new vocabulary that will be introduced. There is a website (www.eduplace.com/parents) that offers parent support in the areas of Family Letters in both English and Spanish, for homework help, and other information.

Weaknesses: There were no weaknesses observed.

STUDENT EXPERIENCES

Strengths: A booklet of blackline masters containing various problem solving strategies is included in the material along with a Teacher's Edition.

Weaknesses: There were limited cross-curricular and real-world connections.

TECHNOLOGY

Strength: The Lesson Planner is included with the Teacher's materials and is user friendly and contains the learning objectives and other pertinent information for lesson plans. The Skills Tutorial CD is dual platform and can be used. The Lesson Planner, Skills Tutorial, and Test Generator are included when classroom sets are purchased. The student materials on line include assessments, test taking strategies, and brain teasers.

Weaknesses: The Sunburst program and supplemental CDs must be purchased separately.

Houghton Mifflin Mathematics

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RESOURCE MATERIALS

Strengths: The Teacher's Edition includes a page in each chapter on strategies to reach special needs students. The Sunburst program is an excellent resource for special needs students even though it must be purchased separately.

Weaknesses: Visually impaired students will require magnification tools in order to see the monitor when using the Sunburst program, website, or CDs.

If this material is available in digital format, KDE strongly recommends that it be considered if there are students in the school who have a need for this type of material. **Is Available in digital format**

Recommended by reviewers to State Textbook Commission as a basal textbook or program.

OTHER COMMENTS:

PUBLISHER'S EXPLANATION OF REVIEWERS' COMMENTS

(By action of the State Textbook Commission, publishers are being provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the written evaluation.)

STANDARDS FOR MATHEMATICS EVALUATION INSTRUMENT

Content/Process

- 1. Material is comprehensive and includes content emphasized in Kentucky's Learning Goals and Academic Expectations and supported by the Core Content for Assessment, Program of Studies, and relevant National Standards.**

Rating: Strong

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- 2. Content appears to be free from factual errors.**

Rating: Strong

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- 3. Content makes connections to other content areas across the curriculum.**

Rating: Strong

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Houghton Mifflin Mathematics

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4. Concepts and application of skills to real-life situations are introduced when appropriate.

Rating: Strong

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5. Content appears to be free of social, ethnic, racial, religious, gender, and geographic bias.

Rating: Strong

Comments: A separate booklet entitled Kentucky Teacher's Edition is included with the Teacher's Edition. This booklet includes "Meeting the Needs of KY Teachers and Students", "Chapter Planner Charts with correlations to the KY Core Content for Mathematics Assessment", and "Grade-level correlations of Houghton Mifflin Mathematics to the Kentucky Core Content".

6. Material is flexible and accommodates various learning styles, interest/ability levels, and intelligences, including adaptations and accommodations for students with special needs.

Rating: Strong

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7. Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout.

Rating: Strong

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8. Content reflects research-based practices (e.g., hands-on activities, technology, problem-solving situations).

Rating: Strong

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9. Concepts are explored in depth and reinforced throughout.

Rating: Strong

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Houghton Mifflin Mathematics

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"Meeting the Needs of KY Teachers and Students", "Chapter Planner Charts with correlations to the KY Core Content for Mathematics Assessment", and "Grade-level correlations of Houghton Mifflin Mathematics to the Kentucky Core Content".

Assessment

1. Student assessment is aligned with the instructional program. Assessment activities are similar to learning activities.

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

2. Assessment activities examine the extent to which students have internalized and made sense of mathematical concepts and whether they can use mathematics to communicate their ideas.

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

3. Assessment activities provide opportunities for students to demonstrate knowledge and skills in real-life situations and interdisciplinary applications.

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

4. A variety of assessments (e.g., diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer, performance, portfolio prompts) is included.

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

5. Assessment activities provide opportunities for student integration of technology in the assessment process.

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

6. Student assessment is aligned with the instructional program. Assessment activities are similar to learning activities.

Rating: Strong

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Houghton Mifflin Mathematics

Publisher: Houghton Mifflin Co.

- 8. Assessment activities examine the extent to which students have internalized and made sense of mathematical concepts and whether they can use mathematics to communicate their ideas.**

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

- 9. Assessment activities provide opportunities for students to demonstrate knowledge and skills in real-life situations and interdisciplinary applications.**

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

- 10. A variety of assessments (e.g., diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer, performance, portfolio prompts) is included.**

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

- 11. Assessment activities provide opportunities for student integration of technology in the assessment process.**

Rating: Strong

Comments: The textbook format is consistent between the practice pages and assessment activities.

Organization and Structure

- 1. Organization is logical and allows for spiraling of content.**

Rating: Strong

Comments:

- 2. Language is clear and concise with correct grammar and sentence structure.**

Rating: Strong

Comments:

- 3. Vocabulary and key terms are clearly defined and easily accessible within each lesson.**

Rating: Strong

Comments:

- 4. Visual illustrations (e.g., graphs, charts, models) and examples are clearly presented and content-related.**

Rating: Strong

Comments:

Houghton Mifflin Mathematics

Publisher: Houghton Mifflin Co.

5. Illustrations and language reflect diversity (e.g., racial, ethnic, cultural, age, gender, disabilities).

Rating: Strong

Comments:

6. Legible type, length of lines, spacing, page layout, and width of margins contribute to overall appearance and use.

Rating: Strong

Comments:

7. Student materials seem durable and conducive to daily student use (e.g., size, weight).

Rating: Strong

Comments:

8. Textbook includes appropriate and sufficient glossary, index, and appendices.

Rating: Strong

Comments:

9. Materials are organized into units of study (or similar structures) with daily lessons that include worthwhile, real-world tasks.

Rating: Strong

Comments:

10. Materials can be easily understood by students and parents.

Rating: Strong

Comments:

Student Experiences

1. The program emphasizes students *doing* mathematics rather than *memorizing* mathematics.

Rating: Strong

Comments:

2. Both group and individual activities are included.

Rating: Strong

Comments:

Houghton Mifflin Mathematics

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- 3. Materials and activities provide authentic applications that allow students to make meaningful connections across the curriculum, to real-world situations, and to interrelated mathematical concepts.**

Rating: Strong

Comments:

- 4. Materials and activities encourage students to explore and investigate mathematical ideas through various problem-solving techniques.**

Rating: Strong

Comments:

- 5. Materials and activities encourage students to read, write, and discuss mathematics.**

Rating: Strong

Comments:

- 6. Materials and activities ask students to reflect upon, clarify, justify, and generalize their mathematical ideas.**

Rating: Strong

Comments:

Technology

- 1. In order for students to focus on decision-making, reflection, reasoning, and problem solving, instructional activities incorporate the use of technology (e.g. calculators, probes, computers) and include instructions on how to use the technology tools.**

Rating: Strong

Comments: The Lesson Planner is included with the Teacher's materials and is user friendly and contains the learning objectives and other pertinent information for lesson plans. The Skills Tutorial CD is dual platform and can be used as a single copy or on the network. The visuals and audio on this CD are excellent.

- 2. Various forms of media are included (e.g., CDs, videos, computer software).**

Rating: Strong

Comments: The Lesson Planner is included with the Teacher's materials and is user friendly and contains the learning objectives and other pertinent information for lesson plans. The Skills Tutorial CD is dual platform and can be used as a single copy or on the network. The visuals and audio on this CD are excellent.

- 3. Student materials are available online.**

Rating: Strong

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Resource Materials

1. Teacher materials coordinate easily with student materials (e.g., additional resources included at point of need, student pages shown, manipulatives appropriate for indicated lesson, instructional technology indicated).

Rating: Strong

Comments:

2. Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels.

Rating: Strong

Comments:

3. Extension activities including adaptations and accommodations for students with special needs.

Rating: Strong

Comments:

4. Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections within mathematics, and references (e.g., solutions manuals, study guides).

Rating: Strong

Comments:

5. Suggestions are made for integration of themes and/or interdisciplinary instruction.

Rating: Strong

Comments:

6. Suggestions are made for family and community involvement and school/home communication.

Rating: Strong

Comments:

7. The included media are durable, easy to use, and have technical merit.

Rating: Strong

Comments:

Houghton Mifflin Mathematics

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8. Teacher resources are available online.

Rating: Strong

Comments: